

Figure 1 a:

Amino acid sequence WT-IL-15-hIgG1:

NWVNVISDLKKTEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLELQVISLESG  
DASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMF  
INTSDPKSADKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDV  
SHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKC  
KVSINKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSD  
IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEA  
LHNHYTQKSLSLSPGK

Figure 1 b:

Amino acid sequence WT-IL-15-mIgG2a:

NWVNVISDLKKTEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLELQVISLESG  
DASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMF  
INTSDPRGPTIKPCPPCKCPAPNLLGGPSVFIFPPKIKDVLMISSLPIVTCVVVD  
VSEDDPDVQISWVFNVEVHTAQTQTHREDYNSTLRVVSALPIQHQQDWMGKEFK  
CKVNNKDLPAPIERTISKPKGSRAPQVYVLPPEEEMTKKQVTLTCMVTDPMPE  
DIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWVERNSYSCSVVHE  
GLHNHHTTKSFSRTPGK

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Figure 2 a:

Amino acid sequence WT-IL-15:

NWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLELQVISLESG  
DASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMF  
INTS

Figure 2 b:

Amino acid sequence hIgG1:

PKSADKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP  
EVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNK  
ALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEW  
ESNGQPENNYKTTTPVLDS DGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHNHY  
TQKSLSLSPGK

Figure 2 c:

Amino acid sequence mIgG2a:

PRGPTIKPCPPCKCPAPNLLGGPSVFIFPPKIKDVLMI SLSPIVTCVVVDVSEDD  
PDVQISW FVNNVEVHTAQTQTHREDYNSTLRVVSALPIQH QDWMSGKEFKCKVNN  
KDLPAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTD FMPEDIYVE  
WTNNGKTELNYKNTEPVLDS DGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNH  
HTTKSFSRTPGK

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Figure 3 a:

Amino acid sequence Igk8

NWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLLLELQVISLESG  
DASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLDSFVHIVDMF  
INTSDPRGPTIKPCPPCKCPAPNLLGGPSVFIFPPKIKDVLMLSLSPIVTCVVVD  
VSEDDPDVQISWVNNVEVHTAQQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFK  
CKVNNKDLPAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPE  
DIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWVERNSYSCSVVHE  
GLHNHHTTKSFSRTPGK

Figure 3 b:

Amino acid sequence 149-Fc

NWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLLLELQVISLESG  
DASIHDTVENLIILANNSLSSNGNVTESGCKECEELEEKNIKEFLDSFVHIVQMF  
INTSDPRGPTIKPCPPCKCPAPNLLGGPSVFIFPPKIKDVLMLSLSPIVTCVVVD  
VSEDDPDVQISWVNNVEVHTAQQTQTHREDYNSTLRVVSALPIQHQQDWMSGKEFK  
CKVNNKDLPAPIERTISKPKGSVRAPQVYVLPPEEEMTKKQVTLTCMVTDFMPE  
DIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWVERNSYSCSVVHE  
GLHNHHTTKSFSRTPGK

Figure 4:

Nucleic acid sequence WT-IL-15-hIgG1:

AACTGGGTGAATGTAATAAGTGATTTGAAAAAACC GAAGATCTTATTCAATCTA  
TGCATATTGATGCTACTTTATATACGGAAAGTGATGTTACCCCAAGTTGCAAAGT  
AACAGCAATGAAGTGCTTTCTCTTGAGATTACAAGTTATTTCACTTGAGTCCGGA  
GATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAACAGTT  
TGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAAC TGGA  
GGAAAAAATATTAAAGAATTTTTGCAGAGTTTTGTACATATTGTCCAAATGTTC  
ATCAACACTTCGGATCCCAAATCTGCTGACAAAAC TCACACATGCCCAACCGTGCC  
CAGCACCTGAACTCCTGGGGGGACCGTCAGTCTTCCTCTTCCCCCAAACCCAA  
GGACACCCTCATGATCTCCCGGACCCCTGAGGTCACGTGCGTGGTGGTGGACGTG  
AGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGAGGTGC  
ATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTG TGGT  
CAGCGTCCCTCACCGTCCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGC  
AAGGTCTCCAACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCA  
AAGGGCAGCCCCGAGAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCT  
GACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGAC  
ATCGCCGTGGAGTGGGAGAGCAATGGGCAGCCGGAGAACA ACTACAAGACCACGC  
CTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCTACAGCAAGCTCACCGTGGA  
CAAGAGCAGGTGGCAGCAGGGGAACGTCTTCTCATGCTCCGTGATGCATGAGGCT  
CTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCTCCGGGTAAATGATCTA  
GA

Figure 5:

Nucleic acid sequence WT-IL-15-mIgG2a:

AACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTA  
TGCATATTGATGCTACTTTATATACGGAAAGTGATGTTACCCCAGTTGCAAAGT  
AACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTTGAGTCCGGA  
GATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAACAGTT  
TGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAACTGGA  
GGAAAAAATATTAAAGAATTTTTCAGAGTTTGTACATATTGTC'CAAATGTTC  
ATCAACACTTCGGATCCCAGAGGGCCACAATCAAGCCCTGTCCTCCATGCAAAT  
GCCCAGCACCTAACCTCTTGGGTGGACCATCCGTCTTCATCTTCCCTCCAAAGAT  
CAAGGATGTACTCATGATCTCCCTGAGCCCCATAGTCACATGTGTGGTGGTGGAT  
GTGAGCGAGGATGACCCAGATGTCCAGATCAGCTGGTTTGTGAACAACGTGGAAG  
TACACACAGCTCAGACACAAACCATAGAGAGGATTACAACAGTACTCTCCGGGT  
GGTCAGTGCCCTCCCCATCCAGCACCAGGACTGGATGAGTGGCAAGGAGTTCAAA  
TGCAAGGTCAACAACAAAGACCTCCCAGCGCCCATCGAGAGAACCATCTCAAAAC  
CCAAAGGGTCAGTAAGAGCTCCACAGGTATATGTCTTGCCTCCACCAGAAGAAGA  
GATGACTAAGAAACAGGTCCTCTGACCTGCATGGTCACAGACTTCATGCCTGAA  
GACATTTACGTGGAGTGGACCAACAACGGGAAAACAGAGCTAAACTACAAGAACA  
CTGAACCAGTCCTGGACTCTGATGGTTCTTACTTCATGTACAGCAAGCTGAGAGT  
GGAAAAGAAGAACTGGGTGGAAAGAAATAGCTACTCCTGTTTCAGTGGTCCACGAG  
GGTCTGCACAATCACCACACGACTAAGAGCTTCTCCCGGACTCCGGGTAAATGAG

Figure 6 a:

Nucleic acid sequence WT-IL-15:

AACTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTATTCAATCTA  
TGCATATTGATGCTACTTTATATACGGAAAGTGATGTTACCCCCAGTTGCAAAGT  
AACAGCAATGAAGTGCTTTCTCTTGAGTTACAAGTTATTTCACTTGAGTCCGGA  
GATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAACAACAGTT  
TGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAGGAAGTGA  
GGAAAAAATATTAAAGAATTTTTCAGAGTTTGTACATATTGTCCAAATGTTC  
ATCAACACTTC

Figure 6 b:

Nucleic acid sequence hIgG1:

CCCAAATCTGCTGACAAAACCTCACACATGCCCACCGTGCCCAGCACCTGAACTCC  
TGGGGGGACCGTCAGTCTTCCTCTTCCCCC AAAACCCAAGGACACCCTCATGAT  
CTCCCGGACCCCTGAGGTCACGTGCGTGGTGGTGGACGTGAGCCACGAAGACCCCT  
GAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAA  
AGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGCGTCCTCACCGT  
CCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAA  
GCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGAG  
AACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGT  
CAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGG  
GAGAGCAATGGGCAGCCGGAGAACAACACTACAAGACCACGCCTCCCGTGCTGGACT  
CCGACGGCTCCTTCTTCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCA  
GCAGGGGAACGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTAC  
ACGCAGAAGAGCCTCTCCCTGTCTCCGGGTAAATGAT

Figure 7:

Nucleic acid sequence mIgG2a:

CCCAGAGGGCCCACAATCAAGCCCTGTCTCCATGCAAATGCCCAGCACCTAACC  
TCTTGGGTGGACCATCCGTCTTCATCTTCCCTCCAAAGATCAAGGATGTACTCAT  
GATCTCCCTGAGCCCCATAGTCACATGTGTGGTGGTGGATGTGAGCGAGGATGAC  
CCAGATGTCCAGATCAGCTGGTTTGTGAACAACGTGGAAGTACACACAGCTCAGA  
CACAAACCCATAGAGAGGATTACAACAGTACTCTCCGGGTGGTCAGTGCCCTCCC  
CATCCAGCACCAGGACTGGATGAGTGGCAAGGAGTTCAAATGCAAGGTCAACAAC  
AAAGACCTCCCAGCGCCCATCGAGAGAACCATCTCAAACCCAAAGGGTCAGTAA  
GAGCTCCACAGGTATATGTCTTGCCTCCACCAGAAGAAGAGATGACTAAGAAACA  
GGTCACTCTGACCTGCATGGTCACAGACTTCATGCCTGAAGACATTTACGTGGAG  
TGGACCAACAACGGGAAAACAGAGCTAAACTACAAGAACACTGAACCAGTCCTGG  
ACTCTGATGGTTCTTACTTCATGTACAGCAAGCTGAGAGTGGAAGAAGAAGAACTG  
GGTGGAAAGAAATAGCTACTCCTGTTTCAGTGGTCCACGAGGGTCTGCACAATCAC  
CACACGACTAAGAGCTTCTCCCGGACTCCGGGTAAATGAG

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Figure 8 a:

Nucleic acid sequence of murine IgK leader:

ATGGAGACAGACACACTCCTGCTATGGGTACTGCTGCTCTGGGTTCAGGTTCCA  
CTGGTGAC

Figure 8 b:

Nucleic acid sequence of human CD5 leader:

ATGCCCATGGGGTCTCTGCAACCGCTGGCCACCTTGTAACCTGCTGGGGATGCTGG  
TCGCTTCCTGCCTCGGA

Figure 8 c:

Nucleic acid sequence of human CD4 leader:

ATGAACCGGGGAGTCCCTTTTAGGCACTTGCTTCTGGTGCTGCAACTGGCGCTCC  
TCCCAGCAGCCACTCAGGGA

Figure 8 d:

Nucleic acid sequence of human IL-2 leader:

ATGTACAGGATGCAACTCCTGTCTTGCAATTGCACTAAGTCTTGCACTTGTCACAA  
ACAGT



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Figure 9 a:

Nucleic acid sequence of human MCP leader:

ATGAAAGTCTCTGCCGCCCTTCTGTGCCTGCTGCTCATAGCAGCCACCTTCATTC  
CCCAAGGGCTCGCT

Figure 9 b:

Nucleic acid sequence of the short native human IL-15  
leader:

ATGTCTTCATTTTGGGCTGTTTCAGTGCAGGGCTTCCTAA

Figure 9 c:

Nucleic acid sequence of the long native human IL-15  
leader:

ATGAGAATTTTCGAAACCACATTTGAGAAGTATTTCCATCCAGTGCTACTTGTGTT  
TACTTCTAAACAGTCATTTTCTAACTGAAGCTGGCATTTCATGTCTTCATTTTGGG  
CTGTTTCAGTGCAGGGCTTCCTAAACAGAAGCC

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Figure 10:

Igk8 nucleic acid sequence

ATGGAGACAGACACACTCCTGCTATGGGTACTGCTGCTCTGGGTTCAGGTTCCA  
CTGGTGACAACCTGGGTGAATGTAATAAGTGATTTGAAAAAATTGAAGATCTTAT  
TCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTACCCCCAGT  
TGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTTG  
AGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAACTGATCATCCTAGCAAA  
CAACAGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAG  
GAACTGGAGGAAAAAATATTAAAGAATTTTGGACAGTTTGTACATATTGTCG  
ACATGTTTCATCAACACTTCGGATCCCAGAGGGGCCACAATCAAGCCCTGTCCCTCC  
ATGCAAATGCCCAGCACCTAACCTCTTGGGTGGACCATCCGTCTTCATCTTCCCT  
CCAAAGATCAAGGATGTACTCATGATCTCCCTGAGCCCCATAGTCACATGTGTGG  
TGGTGGATGTGAGCGAGGATGACCCAGATGTCCAGATCAGCTGGTTTGTGAACAA  
CGTGGAAGTACACACAGCTCAGACACAAACCCATAGAGAGGATTACAACAGTACT  
CTCCGGGTGGTCAGTGCCCTCCCCATCCAGCACCCAGGACTGGATGAGTGGCAAGG  
AGTTCAAATGCAAGGTCAACAACAAAGACCTCCCAGCGCCCATCGAGAGAACCAT  
CTCAAACCCAAAGGGTCAGTAAGAGCTCCACAGGTATATGTCTTGCCTCCACCA  
GAAGAAGAGATGACTAAGAAACAGGTCACTCTGACCTGCATGGTCACAGACTTCA  
TGCTTGAAGACATTTACGTGGAGTGGACCAACAACGGGAAAACAGAGCTAAACTA  
CAAGAACACTGAACCAGTCCTGGACTCTGATGGTTCTTACTTCATGTACAGCAAG  
CTGAGAGTGGAAAAGAAGAACTGGGTGGAAAGAAATAGCTACTCCTGTTTCAGTGG  
TCCACGAGGGTCTGCACAATCACCACACGACTAAGAGCTTCTCCCGGACTCCGGG  
TAAATGAG

Figure 11:  
149-Fc nucleic acid sequence

ATGGAGACAGACACACTCCTGCTATGGGTACTGCTGCTCTGGGTTCAGGTTCCA  
CTGGTGACAACCTGGGTGAATGTAATAAGTGATTTGAAAAAAATTGAAGATCTTAT  
TCAATCTATGCATATTGATGCTACTTTATATACGGAAAGTGATGTTACCCCCAGT  
TGCAAAGTAACAGCAATGAAGTGCTTTCTCTTGGAGTTACAAGTTATTTCACTTG  
AGTCCGGAGATGCAAGTATTCATGATACAGTAGAAAATCTGATCATCCTAGCAAA  
CAACAGTTTGTCTTCTAATGGGAATGTAACAGAATCTGGATGCAAAGAATGTGAG  
GAACTGGAGGAAAAAAATATTAAGAATTTTTGGACAGTTTTGTACATATTGTCC  
AAATGTTTCATCAACACTTCGGATCCCAGAGGGCCCAATCAAGCCCTGTCCTCC  
ATGCAAATGCCCAGCACCTAACCTCTTGGGTGGACCATCCGTCTTCATCTTCCCT  
CCAAAGATCAAGGATGTACTCATGATCTCCCTGAGCCCCATAGTCACATGTGTGG  
TGGTGGATGTGAGCGAGGATGACCCAGATGTCCAGATCAGCTGGTTTGTGAACAA  
CGTGGAAGTACACACAGCTCAGACACAAACCCATAGAGAGGATTACAACAGTACT  
CTCCGGGTGGTCAGTGCCCTCCCCATCCAGCACCAGGACTGGATGAGTGGCAAGG  
AGTTCAAATGCAAGGTCAACAACAAAGACCTCCCAGCGCCCATCGAGAGAACCAT  
CTCAAACCCAAAGGGTCAGTAAGAGCTCCACAGGTATATGTCTTGCCTCCACCA  
GAAGAAGAGATGACTAAGAAACAGGTCACCTCTGACCTGCATGGTCACAGACTTCA  
TGCTTGAAGACATTTACGTGGAGTGGACCAACAACGGGAAAACAGAGCTAAACTA  
CAAGAACACTGAACCAGTCCTGGACTCTGATGGTTCTTACTTCATGTACAGCAAG  
CTGAGAGTGGAAAAGAAGAACTGGGTGGAAAGAAATAGCTACTCCTGTTTCAGTGG  
TCCACGAGGGTCTGCACAATCACCACACGACTAAGAGCTTCTCCCGGACTCCGGG  
TAAATGAG

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Figure 12:

Inhibitory or proliferation-promoting effect of different protein constructs on the IL-15-mediated proliferation of CTLL-2 cells:

